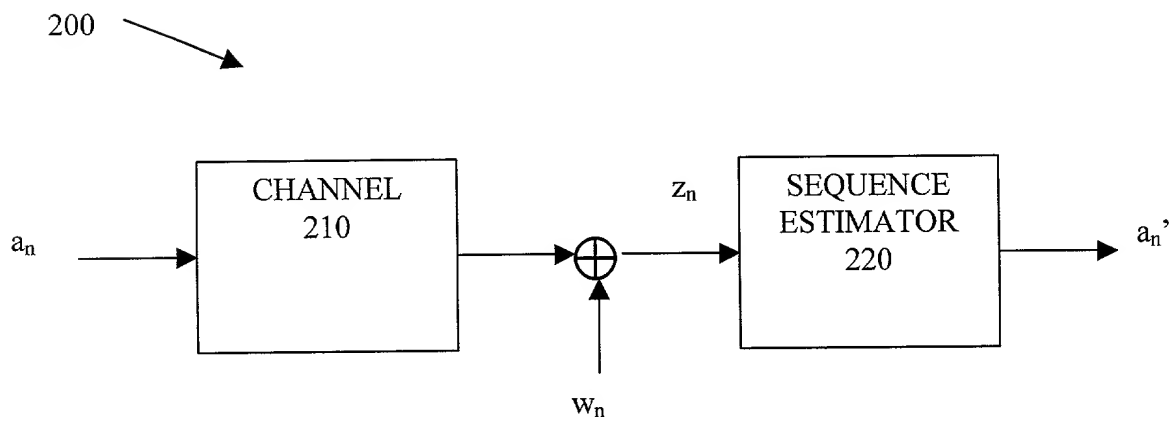
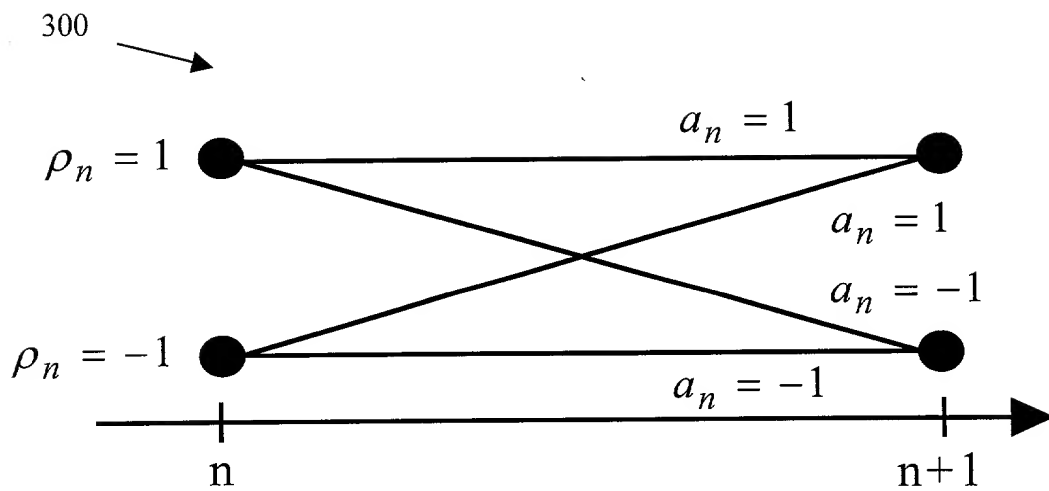


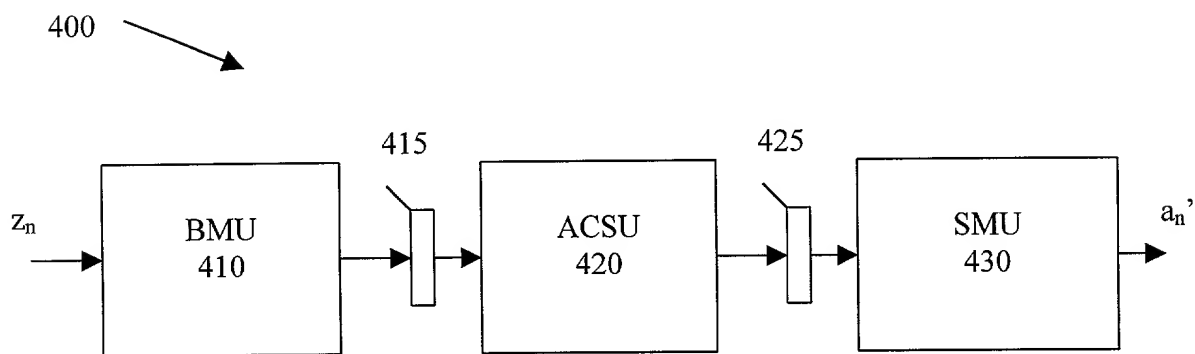
**FIG. 1**



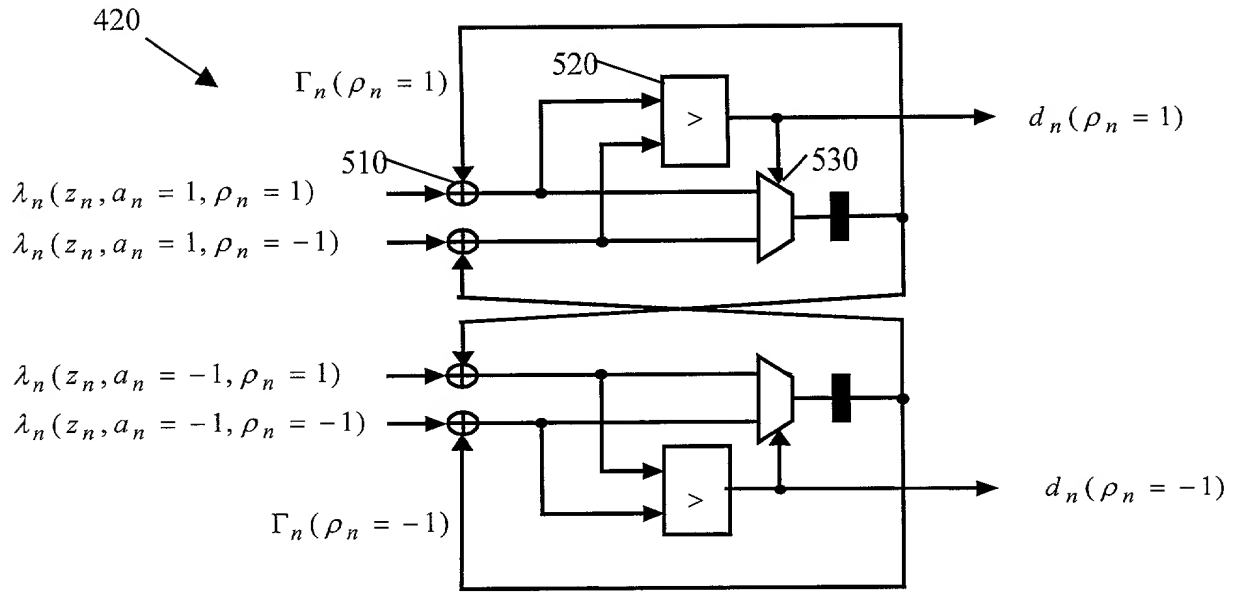
**FIG. 2**



**FIG. 3**



**FIG. 4**



**FIG. 5**

Complexity and Critical Path Analysis Table -- 600

|                      | <b>MLSE<br/>620</b>  | <b>RSSE<br/>630</b>                        |
|----------------------|----------------------|--|
| <b>Complexity</b>    |                      |  |
| No. of states:       | $2^L$                | $2^K$                                      |
| No. of BMs           | $2^{L+1}$            | $2^{K+1}$                                  |
| ADDs in DFU:         | —                    | $S \times L$                               |
| <b>Critical path</b> | 2 ADDs<br>2-to-1 MUX | $L-K+3$ ADDs<br>2-to-1 MUX<br>LUT<br>SHIFT |

**FIG. 6**

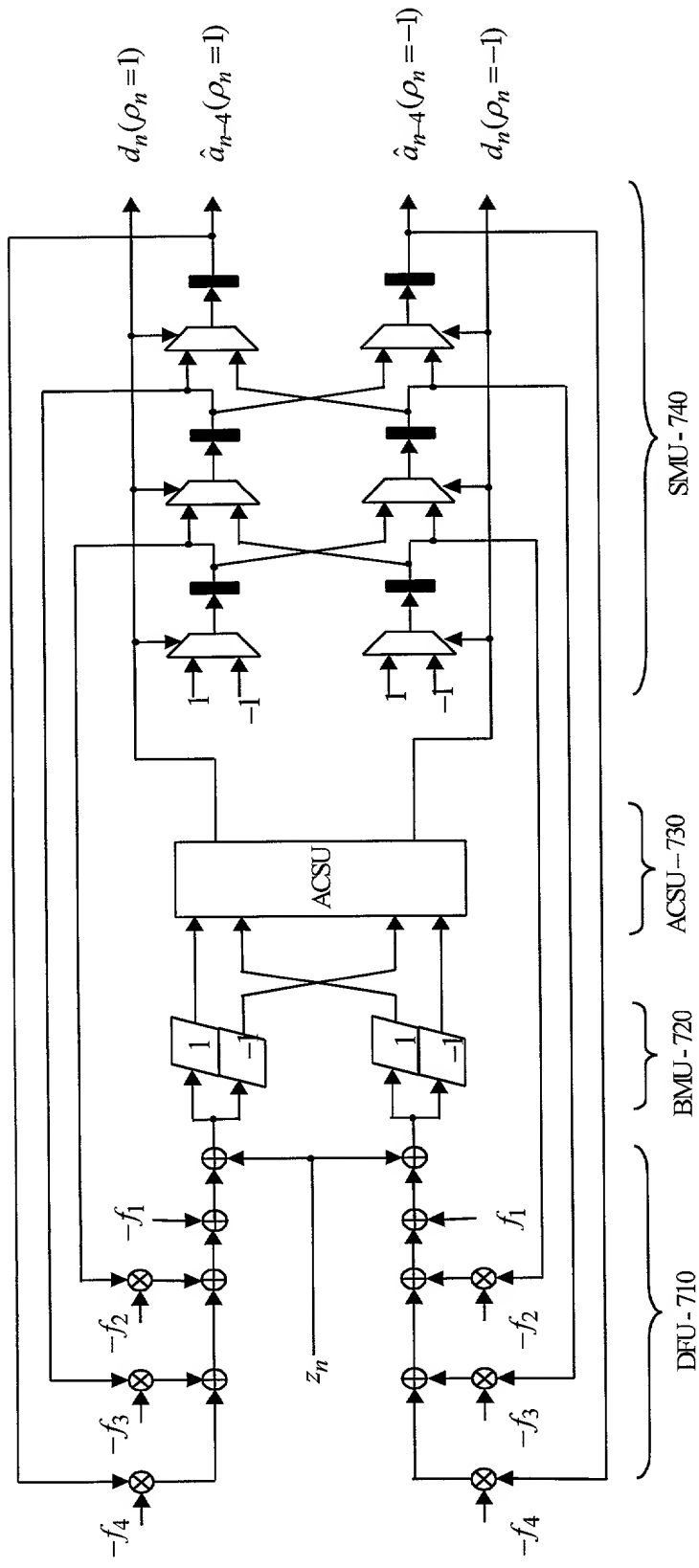


FIG. 7A

$$x \rightarrow \boxed{c} \rightarrow y \equiv y = (x - c)^2$$

FIG. 7B

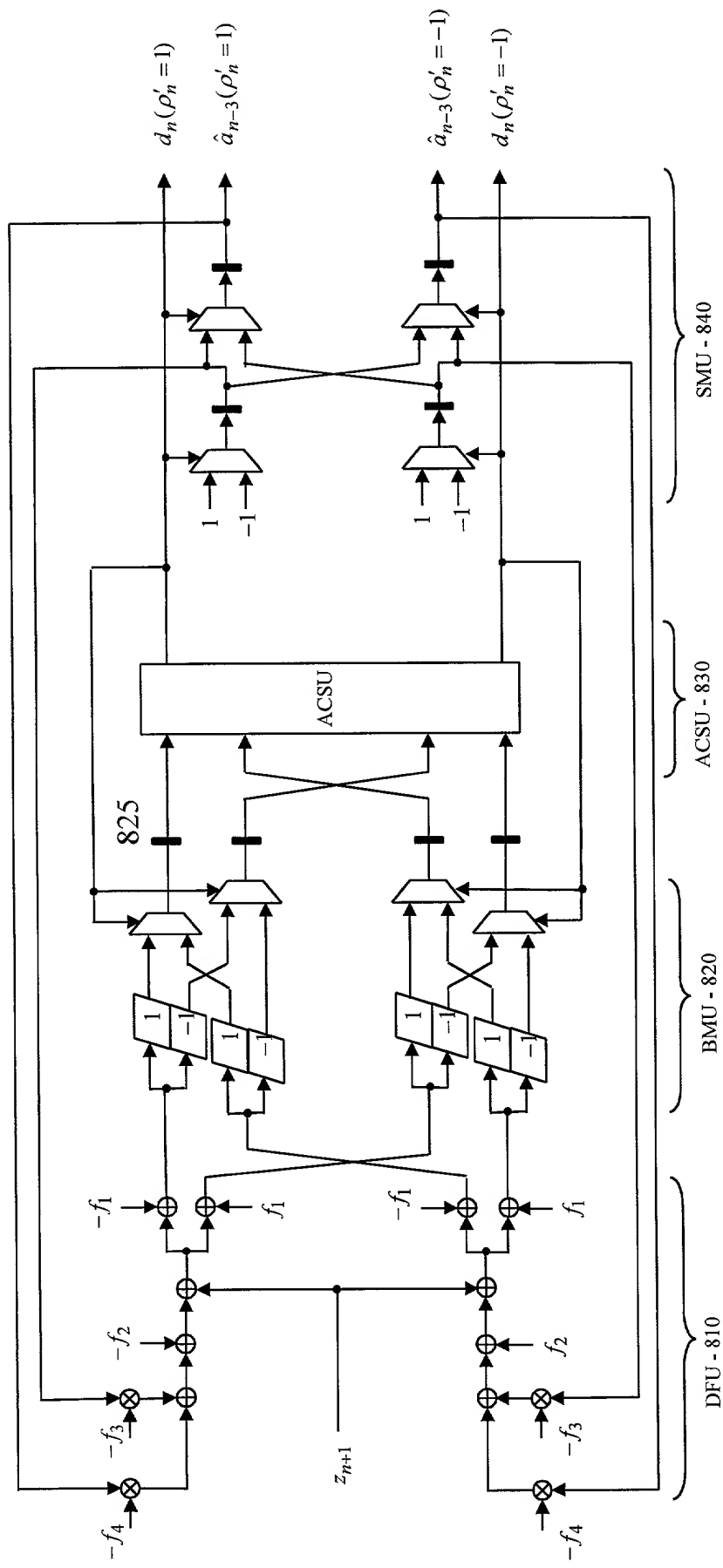


FIG. 8



Complexity and Critical Path Analysis Table of Pipelined RSSE - 1000

|                               | Pipelined RSSE                             |
|-------------------------------|--|
| Complexity                    |  |
| No. of BMs:                   | $2^{K+2}$                                  |
| ADDs in DFU:                  | $S \times (L - M + 2M) = S \times (L + M)$ |
| Critical path ( $M = L - K$ ) | 2 ADDs<br>2-to-1 MUX                       |

FIG. 10

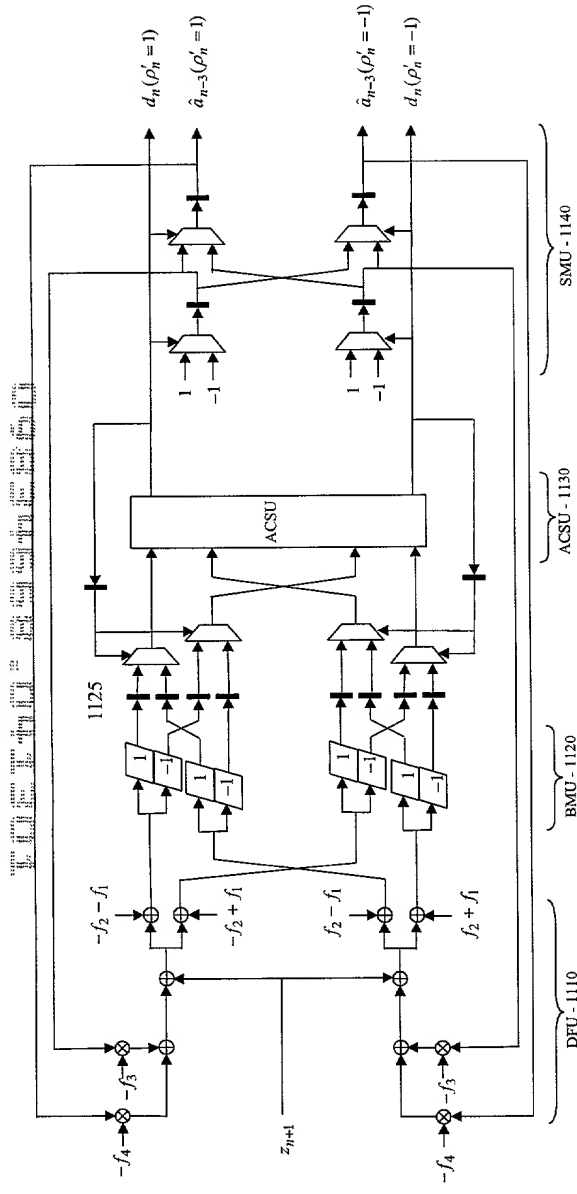


FIG. 11

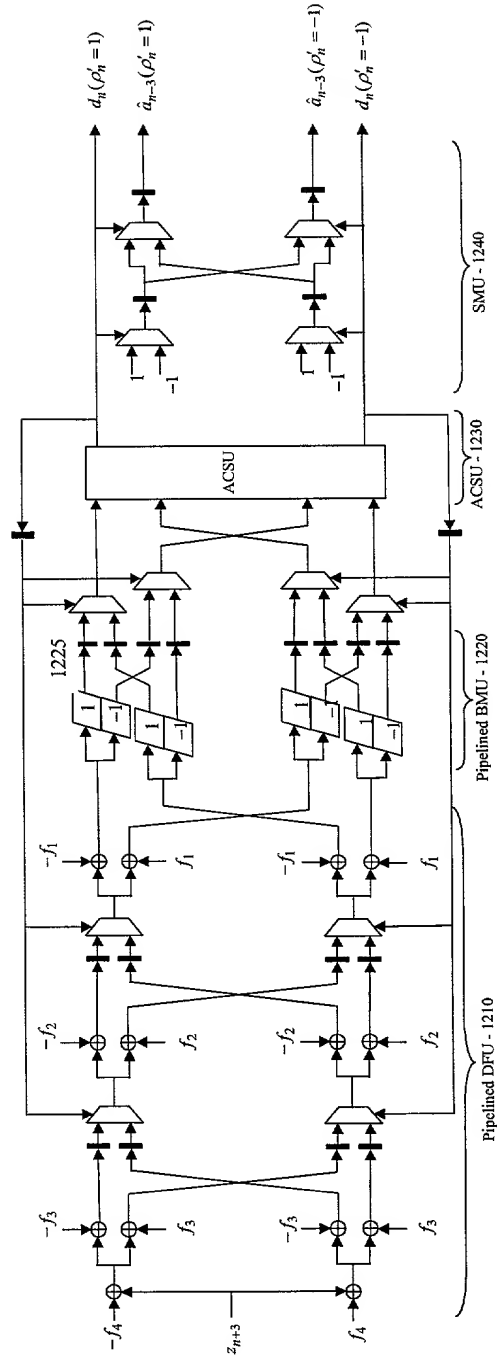


FIG. 12



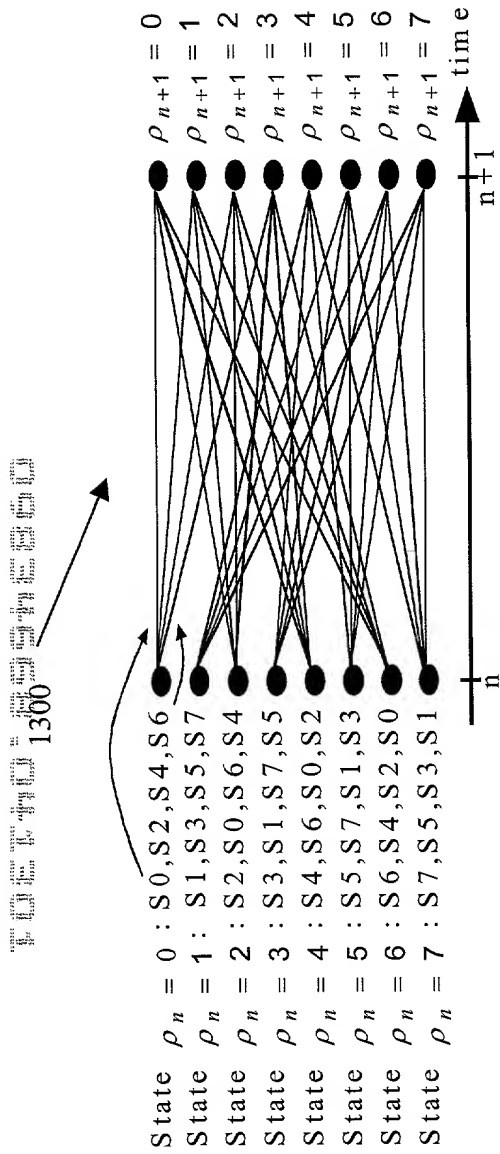


FIG. 13

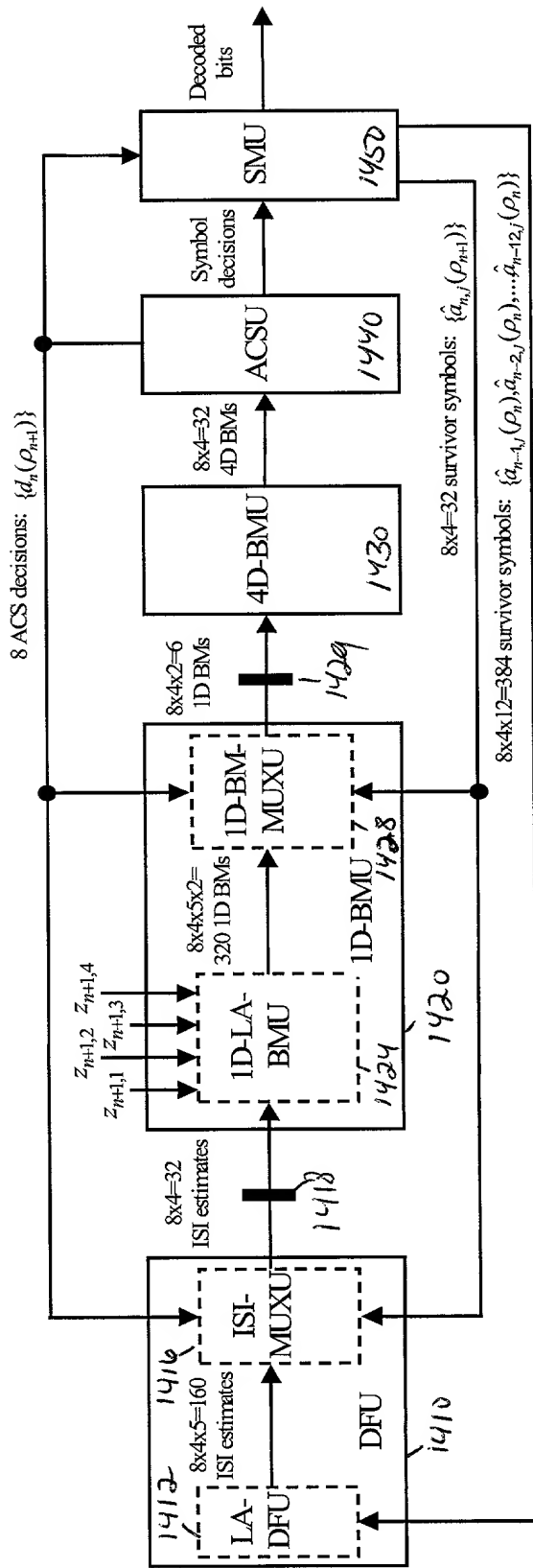
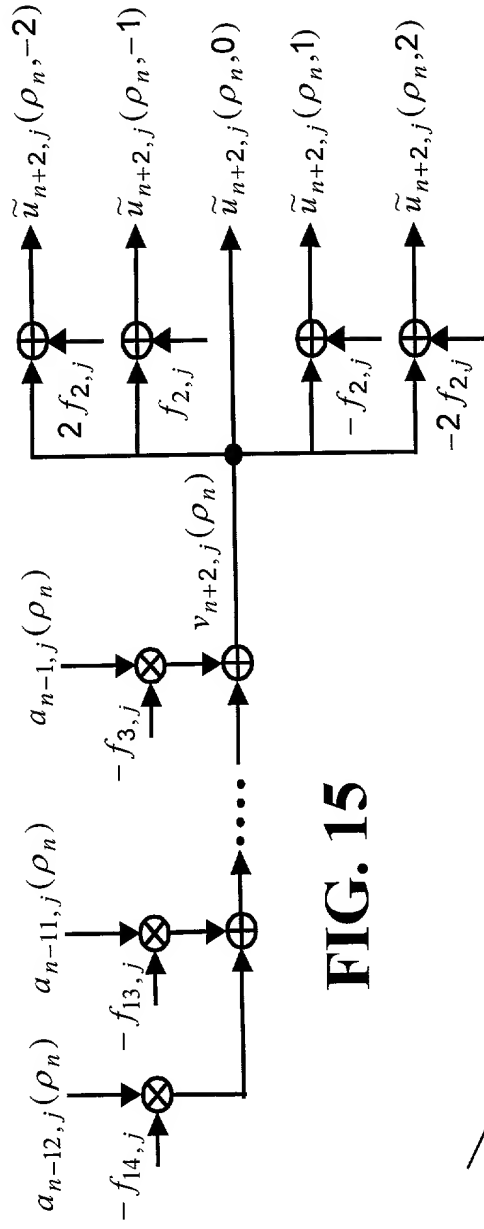
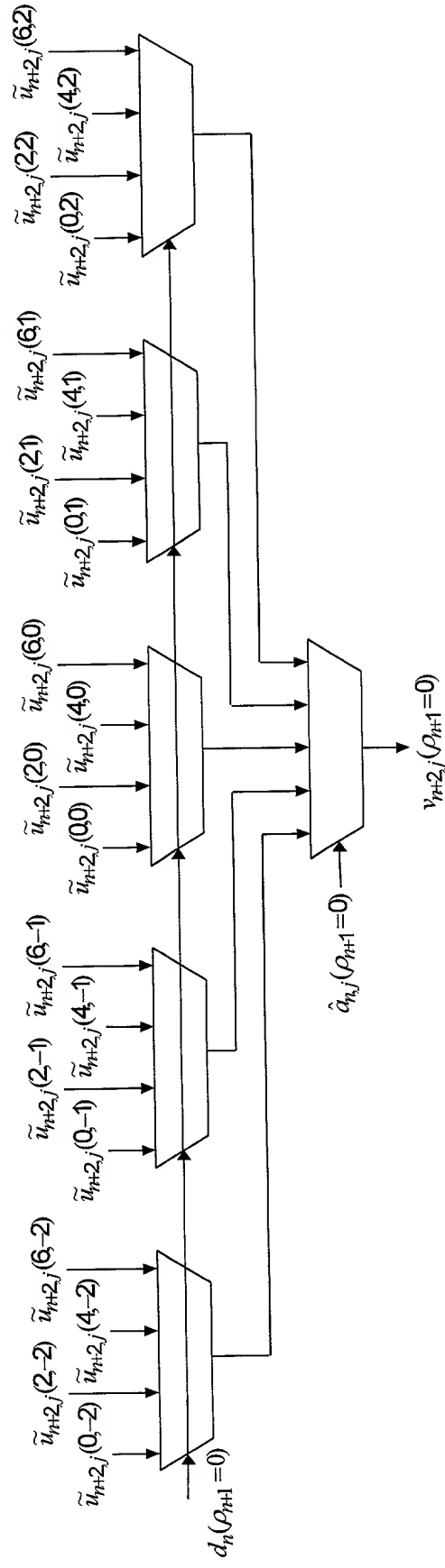


FIG. 14

1412



1416



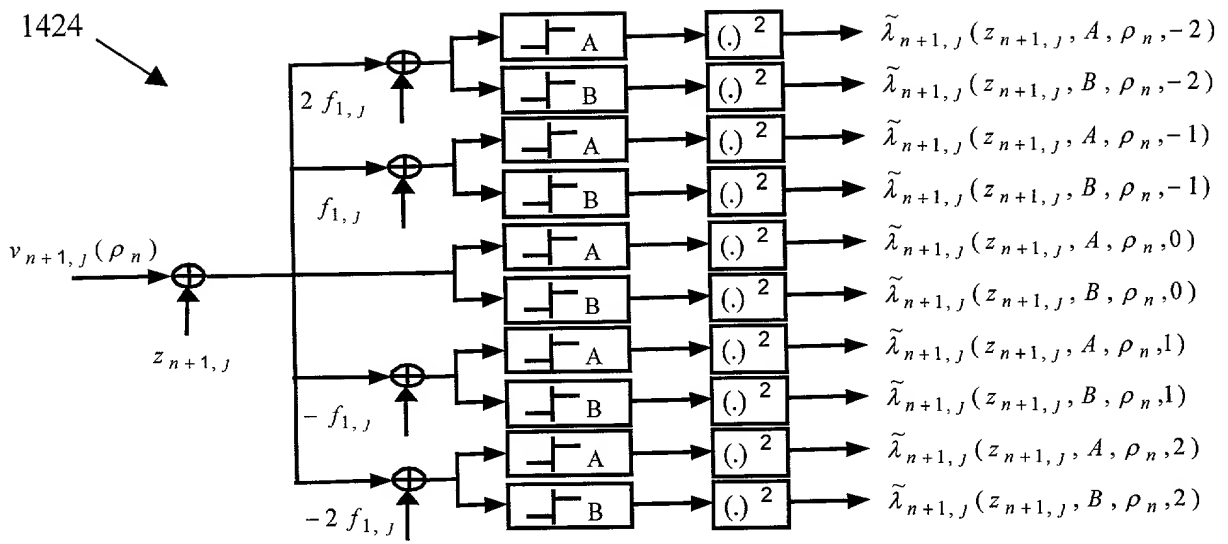


FIG. 17

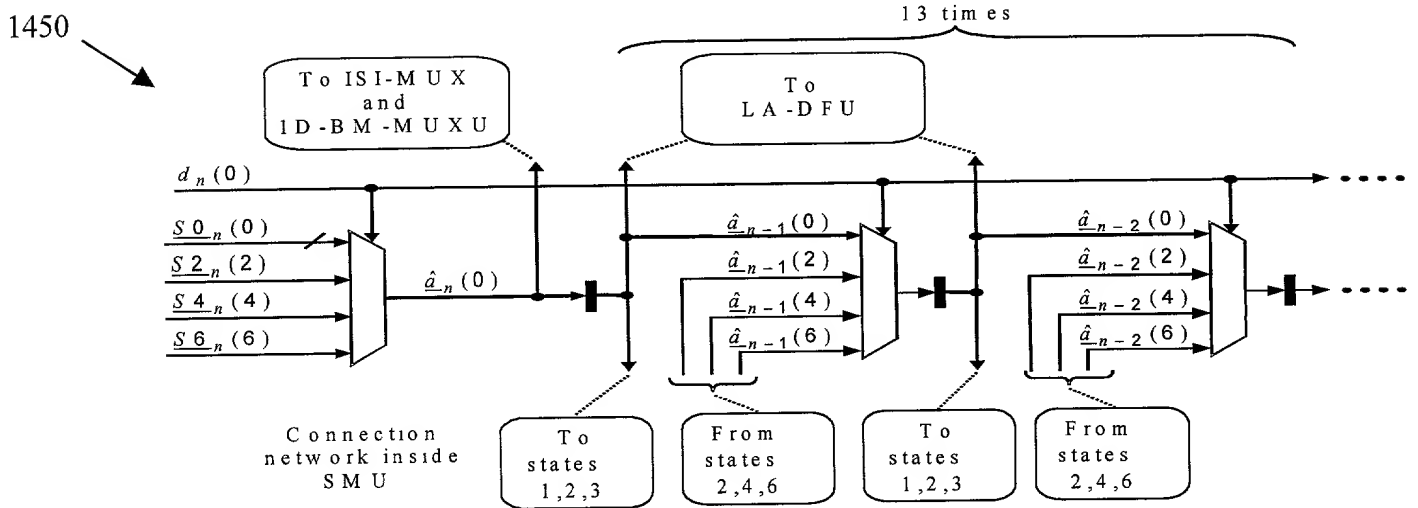


FIG. 18